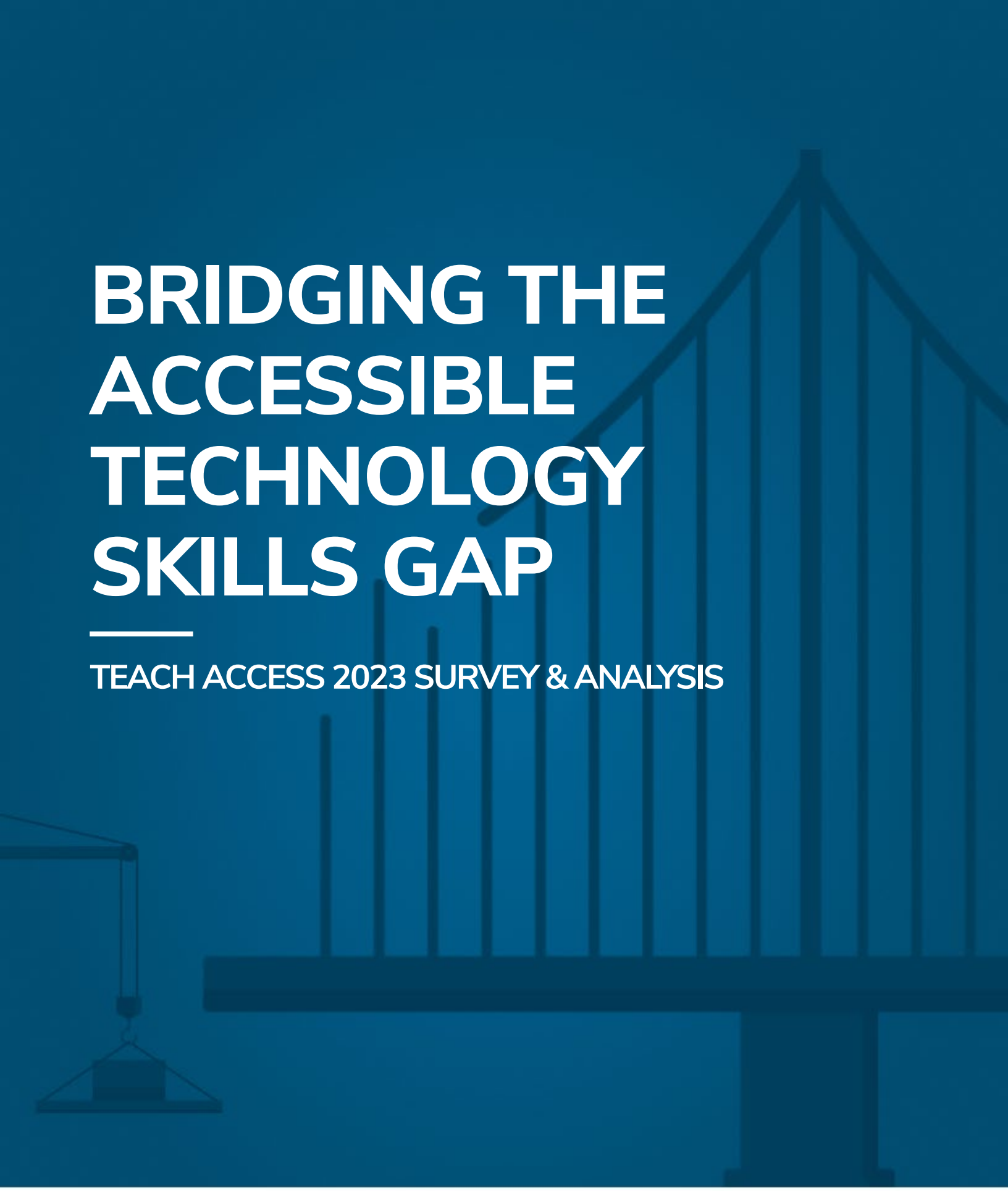

BRIDGING THE ACCESSIBLE TECHNOLOGY SKILLS GAP

TEACH ACCESS 2023 SURVEY & ANALYSIS

teach access
teachaccess.org

AFB Talent Lab
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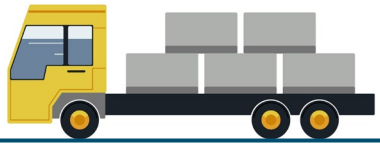
MOVING FROM AWARENESS TO INTEGRATION

Accessibility is a critical component of any digital product or service; it is the key to unlocking the full potential of technology and ensuring that everyone has equal access to the digital world. The lack of digital accessibility excludes people with disabilities from equal access and participation in many daily activities, such as searching for information, accessing documents, and making purchases or payments. An estimated 1.3 billion people around the world have a disability[1], including one in four Americans. Nevertheless, 96.3% of website homepages alone do not meet the standards of the Web Content Accessibility Guidelines (WCAG)[2].

There has been a continually existing skills gap amongst the industry's current workforce that prevents many organizations from creating truly accessible products and services according to the WCAG standards, increasing their risk of alienating and excluding a significant portion of users. Accessibility practices should be included at every stage of the product development cycle, from its ideation and prototyping to its launch and improvement, but currently, this is a rare occurrence. On many occasions, accessibility is only thought of when barriers have been identified after the product's launch. This reactive approach leads to retrofitting or taking shortcuts to accessible solutions that are not always completely accessible and are often a waste of time and financial resources.



The Web Content Accessibility Guidelines (WCAG), developed by the World Wide Web Consortium (W3C) in partnership with experts and organizations around the world, are the international standards that define the principles and requirements for making a user interface accessible for people with a wide range of disabilities.

[1] "Disability." *World Health Organization*, 2023, https://www.who.int/news-room/fact-sheets/detail/disability-and-health. Accessed May 19, 2023.
[2] "The Web Aim Million." *WebAim*, 2023, https://webaim.org/projects/million/. Accessed May 19, 2023.

DEFINING ACCESSIBILITY SKILLS

Teach Access defines accessibility skills as the ability to purposefully create, review, and procure digital products that are both in line with WCAG and are fully usable by people with disabilities.

Accessibility skills can look different across disciplines, functions, and roles. For example, in the design stage of the product development cycle, accessibility skills manifest through usability choices and incorporating specific requirements, instructions, and feedback while, in the development stage, accessibility skills are primarily applied through proper code implementation, ensuring that assistive technologies can interpret and present all content to users effectively and efficiently.

While WCAG serves as the industry-preferred source for accessibility standards, it does not prescribe exactly how these standards should be operationalized within various contexts. Adding to this ambiguity, there is no comprehensive definition of what constitutes accessibility skills, and fundamental accessibility concepts and skills are rarely taught in academic programs in higher education and even standalone programs such as bootcamps, which are instrumental in introducing skilled job seekers to the workforce. As a result, the current workforce most likely does not have a formal background in these skills, and there isn't adequate infrastructure to prepare, mentor, and support the future workforce to develop them either, thus contributing to the widening of the skills gap. These deficits combine together to form what we have come to recognize as the "Accessible Technology Skills Gap," or the gap between the demand for digital accessibility skills in the workplace and the supply of workers who are knowledgeable and skilled in accessibility.

"Most of the developers or designers are self-taught and/or learn accessibility on the job."

ACCESSIBLE TECHNOLOGY SKILLS GAP

In 2018, the Partnership on Employment and Accessible Technology (PEAT) conducted a study to better define the extent of the Accessible Technology Skills Gap. For this study, PEAT collected data from 70 respondents across a broad range of companies and public sector organizations. The results, published in the Accessible Technology Skills Gap Report (2018), supported the need to increase attention to education and training to build knowledge and skills in accessibility. In the study, a majority of respondents found it "difficult or very difficult" to find job candidates with accessibility skills, with demand for such talent expected to rise in the following years. The results of the study also revealed that the Accessible Technology Skills Gap can lead to increased costs and decreased productivity.[3]

Four years later, Teach Access sought to measure the current state of the Accessible Technology Skills Gap and identify any progress toward shrinking that gap. With this study, the scope of the survey was expanded to include more diverse sectors and locations as well as gauge the overall status of accessibility throughout industry. In the Fall of 2022, Teach Access administered the updated version of PEAT's 2018 study to its community partners and associated networks, receiving 107 responses.

The results show that **four years later, the Accessible Technology Skills Gap is still significant.** While there has been some growth toward accessibility awareness and a sense of responsibility to adopt accessibility policies, the majority of those intentions remain unrealized in practice. Any significant progress toward closing the gap continues to be impeded by the lack of job candidates with accessibility skills. Due to the distribution of the survey invitation, respondents are likely representative of organizations that have demonstrated some form of commitment to accessibility. A larger number of respondents in a more expansive variety of industries could reveal that the Accessible Technology Skills Gap is even wider than measured with this sample.

[3] "Infographic: The Accessible Technology Skills Gap", *Partnership on Employment and Accessible Technology*, 2018, https://www.peatworks.org/infographic-the-accessible-technology-skills-gap/. Accessed May 19, 2023.

DESIGNING THE SURVEY

Qualtrics Survey

- 27 questions, primarily multiple choice with some free response
- 107 completed surveys
- Respondents from USA, United Kingdom, Australia, Canada, India, and Ireland
- Date of survey responses between October 18-December 23, 2022

Top 4 Primary Industries of Survey Respondents:

1. Higher Education (26%)
2. Information Technology (17%)
3. Accessibility Consulting (12%)
4. Financial Services (8%)

ANALYZING THE GAP

Despite the slow progress in closing the Accessible Technology Skills Gap, the results of the 2022 survey revealed some progress.

Accessible Technology Skills Gap Survey Data: 2018 versus 2023

2018

70 Respondents

60% reported that it was “difficult or very difficult” for their organization to find job candidates with accessibility skills, and **0%** felt it was easy.

63% reported their current staff don’t have the accessible technology skills to meet their organizations’ goals.

83% reported seeing a moderate or significant increase in demand for accessibility skills over the last five years. **93%** anticipated this demand for employees with accessibility skills to increase in the future.

2023

107 Respondents

56% reported that it was “difficult or very difficult” for their organization to find job candidates with accessibility skills, and only **2%** felt it was easy or very easy.

44% reported their current staff don’t have the accessible technology skills to meet their organizations’ goals.

75% reported seeing a moderate or significant increase in demand for accessibility skills over the last five years. **86%** anticipated this demand for employees with accessibility skills to increase in the future.

Observation 01

INCREASED AWARENESS

A central recurring theme among respondents was the developing momentum toward more organizations acknowledging the need for building accessibility into their processes as well as for establishing a culture and mindset that values inclusion and empowerment for people with disabilities. **Seventy-five percent (75%)** of respondents reported seeing a **moderate to significant increase** in demand for employees with accessibility skills in their organizations within the last five years. In addition, **eighty-six percent (86%)** anticipated this **demand to increase in the future.** This growing awareness of the need for a workforce with accessibility knowledge and skills is a good step to keep pushing for change in the existing institutional practices that are at the source of the talent pipeline.

Observation 02

INVOLVEMENT OF MEMBERS OF THE DISABILITY COMMUNITY

As part of their commitment to improving the accessibility of their products, some organizations have sought to involve members of the disability community within this process. **Thirty-one percent (31%)** of survey respondents indicated that their organization had a **formal program to hire people with disabilities,** and **several** expressed that they specifically **integrated assistive technology users** into their design and development processes to provide feedback and improve their accessibility.

One survey respondent described how the inclusion of people with disabilities into their teams has facilitated a particularly effective knowledge-sharing opportunity:

> "We learn and test together. It is incredibly helpful to have designers and developers as observers during our accessibility testing. It creates empathy, and we've seen that those professionals then begin to design and develop with accessibility in the forefront of their mind, rather than a stipulation before deployment."

Observation 03

NEED FOR STRATEGY AND STRUCTURE

The new recognition of both the lack of accessibility of their products or services and the accessibility skills gap in their workforce, however, has apparently forced some respondent organizations to try and solve the problem without having the proper infrastructure in place. **Many respondents** indicated confusion and inconsistency regarding how to begin tackling this problem. For example, despite a high number of respondents reporting that their products and services were not fully accessible, only **sixty-two percent (62%)** reported that their organizations currently **had an accessibility policy** in place, and the majority of organizations that reported having an accessibility policy had more than 500 employees. This suggests that the increase in awareness is not necessarily translating into an organized and sustained commitment for systemic change. The lack of strategy and structure has led some employees in respondent organizations to resort to grassroot efforts in their pursuit of accessible products. Unfortunately, these well-intentioned efforts may not be enough to ensure that the organizations' products and services are created with accessibility in mind from the beginning.

Observation 04

DISCONNECT BETWEEN INTENT AND ACTION

The discrepancy between intent and action was also indicated in respondents' descriptions of hiring processes, which should be a means to fill the accessibility skills gap. Despite their stated need for accessibility skills in their workforce, **seventy-three percent (73%)** of respondents stated that either they were unaware of, or that there were no, stated requirements for accessibility expertise or credentials in the standard job descriptions for new design and development positions. On the other hand, **multiple respondents** indicated that when these requirements were stated in the job descriptions, they were "not enforced either during the hiring process or in the day-to-day job." This discrepancy becomes even clearer with some respondents noting that they had no expectations that they could source candidates with these skills or, if a candidate did claim to have these skills, that they were sufficient to accomplish the accessibility goals of the organization.

Many respondents stated that there is a “significant disconnect” between individuals claiming to understand accessibility standards and “creating content that actually adheres to them.”

Observation 05

INCREASING DEMAND FOR ACCESSIBILITY SKILLS

The resulting high demand for accessibility skills can be good news for job seekers who have managed to acquire them. At the same time, the increased competition for these professionals only serves to further exacerbate the gap. The limited number of qualified candidates with these skills could mean that they continue to be hired away from smaller organizations by larger corporations with more financial resources. Respondents described competition with large, private sector companies that can offer higher salaries to new job seekers and professionals who have upskilled during their current employment as a major pain point.

A survey respondent characterized this as one of the principal causes preventing the development and implementation of accessibility skills within their organization:

> “While we want someone with accessibility knowledge and skills, we often can’t find them, so they must learn on the job. Then, the tech industry snaps them up on a regular basis. I think this is one reason the administration is so jaded on hiring roles for accessibility. They see this as a short-term fix because, about the time they are really contributing, they are gone, and we do not typically attract folks [who already have] this skill set because they can make so much more elsewhere. This is an enormous challenge.”

BRIDGING THE GAP

Accessibility should be the standard practice. However, the Accessible Technology Skills Gap continues to be wide and is closing slowly. The path forward cannot be a single solution, nor can it be led by just one source. Accessibility has been, and will always be, a collaborative effort. Governments, industries, educational institutions, and communities: each of them has a role to play in advancing accessibility and inclusiveness.

By joining all of the aforementioned sectors, Teach Access offers everyone the opportunity to contribute to a robust, comprehensive approach. Allying industry, education, and advocacy groups, Teach Access creates opportunities for raising awareness, acquiring foundational knowledge and skills, and driving institutional change. The success of these efforts will be determined by everyone accepting their personal responsibility and taking action.

1 LAYING THE FOUNDATION

There are two components that will help lay the foundation for bridging the gap:

1. Awareness
2. A Competencies Framework

Awareness

The first step towards a future where all products and services are born inclusive is awareness. Accessibility awareness helps us examine the world from a different perspective and identify the barriers that prevent people with disabilities from fully participating in society. This same awareness within an organizational context can help us advocate for policies, processes, and practices that are more accessible and equitable.

> **"What we have are a few people that know a lot about accessibility, what we need are a lot of people who know a little"**
>
> **- Matt May, Adobe**

A Competencies Framework

Before there can be any expectations regarding the adoption and implementation of accessibility, core accessibility concepts, skills, and best practices have to be codified in a way that promotes some manner of consistency. There is a need for a framework that encompasses the complexity of accessibility theory and practice, and that is applicable to various scenarios. This framework should also facilitate the interpretation and application of already established standards such as WCAG. Developing this competencies framework could be a great opportunity for academia, industry, and disability advocacy groups to collaborate.

2 BUILDING CAPACITY

Once the foundation has been laid, capacity must be built at both the individual and institutional levels.

Individual Capacity

There are several existing tools and resources that can serve as a starting point for anyone interested in building their own accessibility skills. There are also formal learning experiences, like courses and certifications, that provide opportunities for furthering and validating accessibility knowledge and skills. Through Teach Access' educational programming, students and faculty can start building foundational knowledge and skills in accessibility. In addition, educators wanting to start teaching about accessibility in their classrooms can use or adapt any of the open-source instructional materials from the Teach Access Curriculum Repository (TACR). They can also use the interactive examples found in the Teach Access Tutorial.

Institutional Capacity

When accessibility skills and responsibility are overly localized to specific roles, the quality of an organization's products or services can become inconsistent. Furthermore, accessibility becomes even more removed from becoming an integrated part of the organization's culture. For example, **several survey respondents** stated that accessibility was considered in their practices but noted that it was not conducted holistically but rather on a "project-by-project basis." These organizations also stated that consistency was largely dependent on having the people with an understanding of accessibility involved in the process.

Accessibility should be embedded in the organization's culture and be everyone's responsibility.

For as little as accessibility skills are available amongst current and new designers and developers, there is even less actionable knowledge amongst other roles throughout the workforce. For example, **sixty-one percent (61%)** of survey respondents indicated that there were few to almost no interviewees for general roles at their organizations who had knowledge or experience with accessibility. An additional **twenty-four percent (24%)** of respondents weren't even sure if questions regarding accessibility were asked.

To support organizations in building general capacity, Teach Access created and continues to expand the Accessibility Skills Hiring Toolkit. Employers, Human Resources practitioners, and hiring managers can use this open source toolkit to build job descriptions for a variety of roles, integrating what accessibility knowledge and skills are needed for them. They can also use the toolkit as a reference for gauging job candidates' accessibility knowledge and skills during the interview process. Additionally, job seekers and current employees can leverage the toolkit to gain insight into how they should consider and implement accessibility skills and practices into their day-to-day processes. Formally establishing these expectations for all employees throughout the organization will propel the growing market for accessibility knowledge and skills, and that call for accessibility knowledge and skills will strengthen the case for support that educators, practitioners, and advocates can use to build more advanced institutional and instructional practices grounded in accessibility.

3 SUPPORTING CONTINUOUS GROWTH AND DEVELOPMENT

At the heart of Teach Access' vision lies a critical concept: we don't need everyone to be an expert in accessibility, but we do need everyone to have some working knowledge about it. Building capacity at individual and institutional levels is not enough—systemic change is necessary. Systemic change takes time, but there are actions that can support continuous growth and development.

Expanding Learning Opportunities

Accessibility requires continuous learning and practice. In order for accessibility knowledge and skills to be commonplace across disciplines and industries,

opportunities for acquiring them should be expanded. Accessibility must become a lifelong competency, like literacy and numeracy. Similarly, the ecosystem that provides the opportunities for acquiring and developing these competencies must grow and become more robust. Teaching accessibility knowledge and skills should be a collaborative and complementary effort between educational institutions (both at K-12 and post-secondary level), industry, and professional associations.

Teach Access recognizes that fostering skill growth is not solely about imparting knowledge but also about encouraging and empowering individuals to take ownership in driving accessibility initiatives within their spheres of influence. This is why we strive to provide diverse opportunities for new and continuous learning, innovation, and practical implementation so that accessibility does not remain a novel, isolated skill set but inclusive of all sectors, disciplines, and practices. Currently, we are reimagining our key programmatic activities, such as the Study Away, Faculty Grants, and Faculty Fellowship programs, as well creating new educational programming to address the diverse needs, preferences, and levels of knowledge of students, faculty, practitioners, and leaders.

Fostering Communities of Practice

Building a network of support is crucial to nurturing skills growth in accessibility, especially considering that the process remains such an open frontier. If fostered and leveraged intentionally, such networks within and amongst organizations serve as a valuable resource to create a community of practice where practitioners can share knowledge and experiences, exchange ideas, and seek guidance as they establish and learn to pursue effective accessibility implementation.

Survey respondents provided **numerous anecdotes** regarding the informal sharing of accessibility knowledge amongst their teams as the principal method for their on-the-job learning. However, they also expressed a repeating desire for their organizations to support and cultivate this pursuit amongst their entire staff rather than depend on a few “passionate, knowledgeable members.” It is not only crucial to foster communication within the same organization but also to encourage cross-industry collaboration, allowing for valuable insights from other organizations.

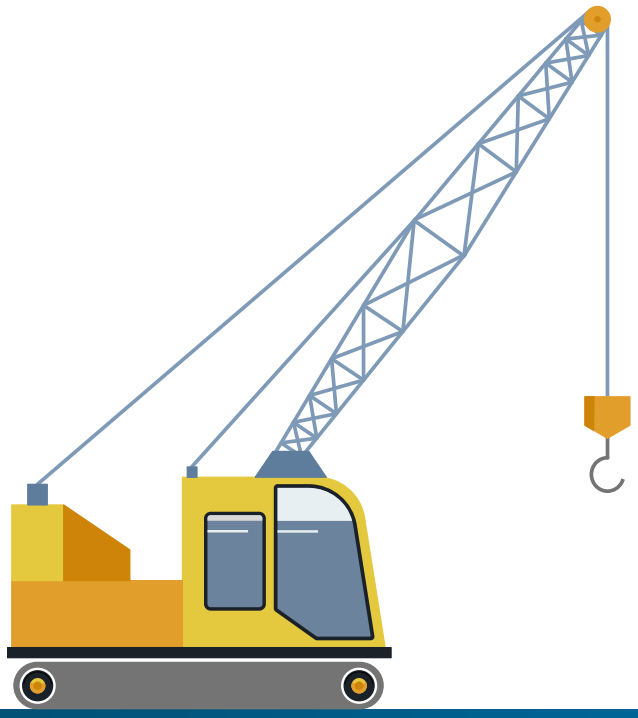
Teach Access is proud to facilitate ongoing communication and collaboration to help cultivate a community of accessibility champions throughout industry, education, and advocacy.

Setting New Standards for Curricula

Another action that can be taken to achieve systemic change is setting new standards for curricula. Accessibility knowledge and skills should not be taught in a single lesson or course but rather taught across the curricula. Although some progress has been made in a handful of institutions, true curricular (and systemic) transformation will be possible when teaching accessibility becomes a requirement for accrediting an educational program. In line with this, Teach Access and its partners are actively engaging with accrediting institutions in order to incorporate accessibility requirements as a part of the accreditation process for educational institutions, as well as for their programs.

Becoming an Ally

One final action to bridge the Accessible Technology Skills Gap and bring systemic change closer is supporting, sponsoring, and amplifying the work of diverse organizations and disability advocacy groups. It is imperative that real and authentic connections are made with organizations that have been doing this work for years. Accessibility is everyone's responsibility and for this systemic change to happen, the work cannot just be done by a select few.



JOIN WITH US

The Accessibility Technology Skills Gap is a serious and urgent challenge that affects millions of people around the world. It is also a challenge that hinders the social and economic development of individuals, organizations, and nations that seek to support and elevate diverse populations. Closing this gap requires a concerted effort from all stakeholders, including governing bodies, educators, businesses, and advocates.

About Teach Access

Teach Access is a non-profit 501(c)(3) organization collaborating with education, industry, and disability advocacy organizations to address the critical need to enhance students' understanding of digital accessibility as they learn to design, develop, and build new technologies.

We invite you to join us in our efforts to build and promote accessibility education and training to create a more inclusive, sustainable future for everyone. Learn more about how you can advance digital inclusion with Teach Access and its partners by contacting info@teachaccess.org or visiting teachaccess.org.

About AFB Talent Lab

Founded in 1921, the American Foundation for the Blind (AFB) is a non-profit 501(c)(3) organization mobilizing leaders, advancing understanding, and championing impactful policies in order to create a world of no limits for people who are blind or visually impaired.

Building on over 20 years of experience with accessibility inclusion projects, AFB launched the AFB Talent Lab in an effort to close the Accessible Technology Skills Gap by upskilling university students to build inclusive products and creating pathways for skills-based employment for people with disabilities through a unique combination of hands-on training and mentorship. Learn more about how you can join or support AFB's immersive accessibility programs by contacting digitalinclusion@afb.org or visiting afb.org/talentlab.